

CLAIMS

What is claimed is:

- 5 1. A bus bar assembly, comprising:
 a power supply member that couples to a power supply;
 a backplane member that couples simultaneously to multiple backplanes,
the backplane member defining multiple rows of holes, each row of holes
including at least two holes; and
10 a set of fasteners that fasten the power supply member to the backplane
member in order to provide a conductive path between the power supply and the
multiple backplanes.
- 15 2. The bus bar assembly of claim 1 wherein the backplane member defines, as the
multiple rows of holes, an $N \times M$ array of holes, and wherein each of N and M are
positive integers greater than or equal to two.
- 20 3. The bus bar assembly of claim 2 wherein the set of fasteners insert through a row
of holes defined by the power supply member and one of N rows of M holes in the
 $N \times M$ array of holes defined by the backplane member.
- 25 4. The bus bar assembly of claim 1 wherein the backplane member defines each of
the multiple rows of holes in a substantially horizontal direction.
5. The bus bar assembly of claim 1 wherein the power supply member includes:
 a first end portion that couples to the power supply; and
 a second end portion that fastens to the backplane member.

6. The bus bar assembly of claim 5 wherein the power supply member further includes:

an intermediate portion that connects the first and second end portions;
wherein the intermediate portion extends in a substantially vertical direction; and
5 wherein the second end portion that fastens to the backplane member extends in a substantially horizontal direction.

7. The bus bar assembly of claim 5 wherein the power supply member further includes:

10 an intermediate portion that connects the first and second end portions;
and wherein the intermediate portion is configured to couple to a side of an electronic equipment cabinet.

8. An electronic system, comprising:

15 a power supply;
multiple backplanes; and
a bus bar assembly electrically interconnected between the power supply
and the multiple backplanes, the bus bar assembly including:

20 a power supply member that couples to a power supply;

a backplane member that couples simultaneously to multiple backplanes, the backplane member defining multiple rows of holes, each row of holes including at least two holes; and

25 a set of fasteners that fasten the power supply member to the backplane member in order to provide a conductive path between the power supply and the multiple backplanes.

9. The electronic system of claim 8 wherein the backplane member of the bus bar assembly defines, as the multiple rows of holes, an $N \times M$ array of holes, and wherein each of N and M are positive integers greater than or equal to two.
- 5 10. The electronic system of claim 9 wherein the set of fasteners of the bus bar assembly insert through a row of holes defined by the power supply member and one of N rows of M holes in the $N \times M$ array of holes defined by the backplane member.
- 10 11. The electronic system of claim 8 wherein the backplane member of the bus bar assembly defines each of the multiple rows of holes in a substantially horizontal direction.
12. The electronic system of claim 8 wherein the power supply member of the bus bar
15 assembly includes:
a first end portion that couples to the power supply; and
a second end portion that fastens to the backplane member.
13. The electronic system of claim 12 wherein the power supply member of the bus
20 bar assembly further includes:
an intermediate portion that connects the first and second end portions;
wherein the intermediate portion extends in a substantially vertical direction; and
wherein the second end portion that fastens to the backplane member extends in a
substantially horizontal direction.

14. The electronic system of claim 12 wherein the power supply member of the bus bar assembly further includes:

an intermediate portion that connects the first and second end portions;
and wherein the intermediate portion is configured to couple to a side of an
5 electronic equipment cabinet.

15. The electronic system of claim 14, further comprising:

an insulation member to separates the intermediate portion of the power
supply member of the bus bar assembly and the side of the electronic equipment
10 cabinet.

16. A method for electrically connecting a power supply to multiple backplanes, the method comprising the steps of:

fastening a power supply member, which couples to a power supply, to a
15 backplane member, which couples simultaneously to the multiple backplanes,
using a set of fasteners in order to form a bus bar assembly, the backplane member
defining multiple rows of holes, each row of holes including at least two holes:

coupling the power supply member of the bus bar assembly to a power
supply; and

20 coupling the backplane member of the bus bar assembly simultaneously to
the multiple backplanes in order to provide a conductive path between the power
supply and the multiple backplanes.

17. The method of claim 16 wherein the backplane member defines, as the multiple
25 rows of holes, an $N \times M$ array of holes, wherein each of N and M are positive
integers greater than or equal to two; and wherein the step of fastening includes
the step of:

inserting the set of fasteners through one of the multiple N rows of M
holes defined by the backplane member and through the power supply member.

18. The method of claim 16 wherein the power supply member includes a first end portion that couples to the power supply, and a second end portion that fastens to the backplane member; and wherein the step of fastening includes the step of:
5 attaching the second end portion of the power supply member to the backplane member using the set of fasteners.
19. The method of claim 18 wherein the power supply member further includes an intermediate portion that connects the first and second end portions; and wherein the method further comprises the step of:
10 coupling the intermediate portion of the power supply member to a side of an electronic equipment cabinet.
20. The method of claim 19 wherein the step of coupling the intermediate portion of the power supply member to the side of the electronic equipment cabinet includes
15 the step of:
positioning an insulation member between the intermediate portion of the power supply member of the bus bar assembly and the side of the electronic equipment cabinet.